

4 Stormwater Management Program. NDOT must comply with the following:

- 4.1 General Requirements: Develop, implement, and enforce a SWMP designed to reduce the discharge of pollutants from NDOT's MS4 to the maximum extent practicable (MEP) to protect water quality, and to satisfy the appropriate water quality requirements of the CWA; and,
 - 4.1.1 Submit the SWMP to NDEP no later than one (1) year after the effective date of this permit; and,
 - 4.1.2 Fully implement the SWMP within five (5) years of the authorization date of this permit; and,
 - 4.1.3 Identify the best management practices (BMPs) that NDOT or another entity will implement; and,
 - 4.1.4 Identify the measurable goals for BMPs, as appropriate, including the months and years in which NDOT will undertake required actions; and,
 - 4.1.5 Provide a rationale for how and why NDOT selected each of the BMPs and measurable goals for the SWMP; and,
 - 4.1.6 Implementation of best management practices consistent with the provisions of the stormwater management program as required by this permit constitutes compliance with the standard of reducing pollutants to the "maximum extent practicable"; and,
 - 4.1.7 The management program shall include a description of staff and resources available to implement the program elements; and,
 - 4.1.8 Separate proposed programs, or one or more joint programs, may be submitted by NDOT; and,
 - 4.1.9 Proposed programs may impose controls on a system wide basis, a watershed basis, a jurisdiction basis, or on individual outfalls; and,
 - 4.1.10 Proposed management programs shall describe priorities for implementing controls and shall be based on Public Outreach and Education; Illicit Discharge and Detection; Industrial Facility Monitoring and Control; and a Construction Site BMP Program; and,
 - 4.1.11 Implement other BMPs identified in this permit; and,
 - 4.1.12 Pending submittal of the SWMP, continue to implement and maintain current BMPs.
- 4.2 ***Adequate legal authority:***

4.2.1 The SWMP shall provide a description of NDOT's' legal authority, established by statute, regulation, ordinance or series of contracts which authorizes or enables the applicant to:

4.2.1.1 Prohibit through regulation, ordinance, order, or similar means, illicit discharges to the municipal separate storm sewer;

4.2.1.2 Control through regulation, ordinance, order, or similar means the discharge to a municipal separate storm sewer from spills, dumping or disposal of materials other than stormwater;

4.2.1.3 Require compliance with conditions in regulation, ordinances, permits, contracts or orders; and

4.2.1.4 Carry out all inspection, surveillance, and monitoring procedures necessary to determine compliance and noncompliance with the prohibition of illicit discharges to the MS4s.

4.2.2 NDOT shall provide written notice to NDEP of any formal proposal to modify the regulation or ordinances regulating stormwater discharges into the municipal storm sewers. Before any regulation or ordinance is modified, NDEP shall have an opportunity to comment on the proposed modification.

4.3 **Source Identification:**

4.3.1 The SWMP shall provide, at a minimum: maps of NDOT's MS4, including the location of any major outfall that discharges to waters of the United States.

4.3.2 NDOT shall develop a list of industrial facilities subject to stormwater permitting requirements within their control.

4.4 **Characterization data:**

4.4.1 The SWMP shall evaluate whether existing data collection programs should be modified to improve characterization of stormwater discharges, effects of BMPs, or ambient water quality. This information shall be submitted for approval as part of the annual monitoring plan required in section 5.1.1.

4.5 **Public Outreach and Education, and Intergovernmental Coordination:**

4.5.1 The management program covering the duration of the permit shall include a section which involves public outreach and education, and where necessary intergovernmental coordination, to reduce the discharge of pollutants to the maximum extent practicable using management practices, control techniques and system, design and engineering methods, and such other provisions which are appropriate.

- 4.5.2 In areas where NDOT is participating in an area wide Public Education Program, NDOT shall continue participation. The Public Education Program shall address the three main audiences that impact NDOT storm water discharges. The three audiences are NDOT's employees, construction contractors, and the general public. The program shall contain the following elements for each of these groups:
 - 4.5.2.1 NDOT's employees
 - 4.5.2.1.1 NDOT shall implement the program specified in the SWMP.
 - 4.5.2.1.2 NDOT shall provide frequent educational reminders to employees to reinforce the training.
 - 4.5.2.2 NDOT Construction Contractors
 - 4.5.2.2.1 NDOT shall implement the program specified in the SWMP.
 - 4.5.2.2.2 NDOT shall provide outreach to contractors to raise their awareness of the problems and causes of storm water pollution and to reinforce their training.
 - 4.5.2.3 General Public
 - 4.5.2.3.1 Plan for development and implementation of a public education program: NDOT shall submit a plan for approval by NDEP within 180 days of adoption of this NPDES permit for development and implementation of a Public Education Program that includes education of the general public and commercial and industrial entities whose actions may impair storm water quality discharged from NDOT's properties, facilities and activities. In areas where a NDOT is already part of a Public Education Program with other regulated MS4s, NDOT must continue with their participation in the program.
 - 4.5.2.3.2 The plan shall include the following elements:
 - 4.5.2.3.2.1 Research--A plan for conducting research on public behavior that affects the quality of NDOT's runoff. The information gathered will form the foundation for all the public education conducted.
 - 4.5.2.3.2.2 Public Education Strategy--Develop a three-year public education strategy. The strategy should be based on the research conducted and must include goals and objectives to be achieved regarding changing behaviors.

4.5.2.3.2.3 Mass Media Advertising--Develop and conduct an advertising campaign as a focal point of the public education strategy. The campaign should focus on the behaviors of concern and should be designed to motivate the public to change those behaviors. The public education campaigns may be done as a cooperative effort with other MS4s or NDEP.

4.5.2.3.3 Upon approval of the submitted plan, NDOT shall implement the plan to develop a Public Education Program. The Public Education Program Progress Report on the progress made on the public education program development will be made as part of the Annual Report each year. A proposed public education program will be submitted with the Annual Report. The Public Education Program shall be submitted with the Annual Report.

4.6 ***Best Management Practices:***

4.6.1 A description of structural and source control measures expected to reduce pollutants from runoff that are discharged from the municipal storm sewer system that are to be implemented during the life of the permit, accompanied with a discussion of the basis for the expected reduction of pollutant loads and a proposed schedule for implementing such controls. At a minimum, the description shall include:

4.6.1.1 A description of maintenance activities and a maintenance schedule to reduce pollutants in discharges from MS4s;

4.6.1.2 A description of planning procedures including a plan to reduce the discharge of pollutants from MS4s which receive discharges from areas of new development and significant redevelopment;

4.6.1.3 A description of practices for operating and maintaining public streets, roads and highways and procedures for reducing the impact on receiving waters of discharges from municipal storm sewer systems;

4.6.1.4 A description of procedures to assure that flood management projects assess the impacts on the water quality of receiving water bodies and that existing structural flood control devices have been evaluated to determine if retrofitting the device to provide additional pollutant removal from stormwater is feasible;

4.6.1.5 A description of a program to evaluate and as necessary monitor pollutants in runoff from operating or closed municipal landfills or other treatment, storage or disposal facilities for municipal waste; and

4.6.1.6 A description of a program to evaluate and as necessary reduce pollutants in discharges from MS4s associated with the application of pesticides, herbicides, and fertilizer.

4.7 **Illicit Discharge and Detection:**

- 4.7.1 A description of a Illicit Discharge and Detection Program (IDDP), including a schedule, to detect and remove illicit discharges and improper disposal into the MS4. The proposed program shall include:
- 4.7.1.1 A description of a program, including inspections, to implement and enforce an ordinance, orders or similar means to prevent illicit discharges to the MS4. This program description shall address all types of illicit discharges, however the following category of non-stormwater discharges or flows shall only be addressed where such discharges are identified by NDOT as sources of pollutants to waters of the United States: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20)) to separate storm sewers, uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, and street wash water (program descriptions shall address discharges or flows from fire fighting only where such discharges or flows are identified as significant sources of pollutants to waters of the United States);
 - 4.7.1.2 A description of procedures to conduct on-going field screening activities during the life of the permit, including areas or locations that will be evaluated by such field screens;
 - 4.7.1.3 A description of procedures to be followed to investigate portions of the separate storm sewer system that, based on the results of the field screen, or other appropriate information, indicate a reasonable potential of containing illicit discharges or other sources of non-stormwater;
 - 4.7.1.4 A description of procedures to prevent, contain, and respond to spills that may discharge into the municipal separate storm sewer;
 - 4.7.1.5 A description of a program to facilitate public reporting of the presence of illicit discharges or water quality impacts associated with discharges from MS4s;
 - 4.7.1.6 A description of educational activities, public information activities, and other appropriate activities to facilitate the proper management and disposal of used oil and toxic materials; and

- 4.7.1.7 An assessment of whether the procedures otherwise implemented in response to this paragraph are sufficient to identify instances of exfiltration from the sanitary sewer to the storm sewers, and if not a description of additional activities to be undertaken to control exfiltration.

4.8 Industrial Facility Monitoring and Control:

- 4.8.1 A description of a program to monitor and control pollutants in stormwater discharges to municipal systems from municipal landfills, hazardous waste treatment, disposal and recovery facilities, industrial facilities that are subject to section 313 of title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA), and industrial facilities that the municipal permit applicant determines are contributing a substantial pollutant loading to the municipal storm sewer system. The program shall:
- 4.8.1.1 Identify priorities and procedures for inspections and establishing and implementing control measures for such discharges; and,
- 4.8.1.2 Describe a monitoring program for stormwater discharges associated with the industrial facilities identified in this section, to be implemented during the term of the permit in accordance with the monitoring programs defined in section 5.1.1.

4.9 Construction Site BMP Program:

- 4.9.1 A description of a program to implement and maintain structural and non-structural best management practices to reduce pollutants in stormwater runoff from construction sites to the municipal storm sewer system, which shall include:
- 4.9.1.1 A program to control all construction in the rights-of-way. This includes both construction by NDOT, construction done under contract for NDOT, and construction done by local government agencies or other third parties on NDOT or non-NDOT projects. The program must include:
- 4.9.1.1.1 Review of construction site plans;
- 4.9.1.1.2 Implementation and Maintenance of structural and nonstructural BMPs;
- 4.9.1.1.3 Site inspections and enforcement; and
- 4.9.1.1.4 Education of construction site operators.
- 4.9.1.2 The program must be implemented year round on all construction projects in all parts of the State. The SWMP must be revised to address these requirements and have a program and a schedule for inspections.

- 4.9.1.3 The Construction Management Program shall be in compliance with requirements of the NPDES General Permit for Construction Activities (Stormwater General Permit for Construction Activities).
- 4.9.1.4 A description of nonstructural and structural best management practices for construction sites; and
- 4.9.1.5 A description of procedures for identifying priorities for inspecting sites and enforcing control measures which consider the nature of the construction activity, topography, and the characteristics of soils and receiving water quality; and,
- 4.9.1.6 A description of appropriate educational and training measures for construction site operators.

4.10 **Sharing Responsibility:**

- 4.10.1 NDOT may either share responsibility or assign responsibility with one or more regulated MS4s, and may implement BMPs individually, as a group, or through consultants. The SWMP shall include a description of how responsibility is being shared or assigned.

4.11 **Reviewing and Updating Stormwater Management Programs**

- 4.11.1 NDOT must complete an annual review of the SWMP in conjunction with preparation of the annual report required under Part 5.3
- 4.11.2 NDOT may change the SWMP during the life of the permit in accordance with the following procedures:
 - 4.11.2.1 Changes adding (but not subtracting or replacing) components, controls, or requirements to the SWMP may be made at any time upon written notification to NDEP.
 - 4.11.2.2 Requests for changes replacing an ineffective, unfeasible, or inappropriate BMP specifically identified in the SWMP with an alternate BMP may be submitted to NDEP for approval at any time. If request is denied, NDEP will send NDOT a written response giving a reason for the decision. NDOT's modification requests must include the following:
 - 4.11.2.2.1 An analysis of why the BMP is ineffective, infeasible (including cost prohibitive), or otherwise should be revised or replaced, and
 - 4.11.2.2.2 An analysis of why the replacement BMP is expected to be more effective, feasible, or appropriate than the BMP to be replaced.

4.12 Changes by NDEP:

- 4.12.1 Formal changes requested by NDEP must be made in writing, set forth the time schedule for NDOT to develop the changes, and offer NDOT the opportunity to propose alternative program changes to meet the objective of the requested modification. If NDOT does not agree to the requested changes, changes required by NDEP will be made in accordance with 40 CFR 124.5, 40 CFR 122.62, or as appropriate 40 CFR 122.63.
- 4.12.2 NDEP may request formal changes to the SWMP as needed to:
 - 4.12.2.1 Address impacts on receiving water quality caused, or contributed to, by discharges from the Municipal Separate Storm Sewer System;
 - 4.12.2.2 Include more stringent requirements necessary to comply with new Federal statutory or regulatory requirements; and,
 - 4.12.2.3 Include such other conditions deemed necessary by NDEP to comply with the requirements of the Clean Water Act.

4.13 Responsibility for Stormwater Management Program Implementation:

- 4.13.1 NDOT must implement the SWMP on all new areas added to NDOT's portion of the MS4 (or for which NDOT become responsible for implementation of stormwater quality controls) not later than one year from addition of the new areas.
- 4.13.2 Information on all new annexed areas and any resulting updates required to the SWMP must be included in the annual report.

4.14 Maintenance Program Management:

- 4.14.1 NDOT shall implement the following requirements:
 - 4.14.1.1 Highway Maintenance Activities
 - 4.14.1.1.1 Develop and implement runoff management programs and systems for existing roads, highways, and bridges to reduce runoff pollutant concentrations and volumes entering surface waters.
 - 4.14.1.1.1.1 Identify priority and watershed pollutant reduction opportunities (e.g., improvements to existing urban runoff control structures).
 - 4.14.1.1.1.2 Establish schedules for implementing appropriate controls.
 - 4.14.1.1.1.3 Identify road segments with slopes that are prone to erosion and discharge of sediment and stabilize these slopes to the extent possible.

- 4.14.1.2 Snow and Ice Control: Where abrasives and/or de-icing agents are used on highways, the following shall be recorded:
 - 4.14.1.2.1 Location of the source of abrasives materials.
 - 4.14.1.2.2 Types and chemistry of de-icing agents.
 - 4.14.1.2.2.1 Deicing salt shall be analyzed for: total phosphorus, total nitrogen, iron, and percent NaCl; and,
 - 4.14.1.2.2.2 Alternative deicers shall be analyzed for: total nitrogen, and total phosphorus.
 - 4.14.1.2.3 Type and chemistry of abrasives with the gradation and percent organic matter. Gradation and percent organic matter shall be determined from composite samples. The composite samples shall be taken from one stockpile that represents all deliveries from the originating source. Composite samples shall be taken from every new delivery from a new originating source.
 - 4.14.1.2.4 Abrasives shall be analyzed for: volatile solids, iron, total nitrogen, total phosphorus, and total reactive phosphorus.
- 4.14.1.3 Volume of abrasives and deicing agents used on individual highway's segments.
- 4.14.1.4 Vegetation Control: NDOT shall create a Vegetative Control Program to reflect the following elements:
 - 4.14.1.4.1 Enhancement of the use of appropriate native and adapted vegetation throughout all NDOT's rights-of way for the purpose of preventing erosion and removing pollutants in storm water and nonstorm water runoff.
 - 4.14.1.4.2 Application of herbicides in a manner that minimizes or eliminates the discharge of herbicides to receiving waters. Factors to be considered include timing in relation to expected precipitation events, proximity to water bodies, and the effects of using combinations of chemicals.
 - 4.14.1.4.3 If application of nutrients is required, the application shall be at rates necessary to establish and maintain vegetation without causing significant nutrient runoff to surface water.
 - 4.14.1.4.4 In places where NDOT has already developed vegetation control management plans, NDOT shall continue to implement these plans and integrate them into their overall statewide plan. In instances

where elements of these plans are to be changed or dropped, NDOT shall discuss the changes in the Annual Report.

4.14.1.5 Storm Water Drainage System Facilities Maintenance

4.14.1.5.1 NDOT shall remove all waste from those inlets that pose a significant threat to water quality on an annual basis prior to the winter season each year. All waste removed from drain inlets shall be managed in accordance with all applicable laws and regulations.

4.14.1.5.2 Drain inlets which contain significant materials must be considered for an Illicit Discharge and Detection Program (IDDP) investigation and considered for an enhanced BMP program focused on reducing the sources of the material found in the inlet.

4.14.1.6 Program for Highway Maintenance Facilities

4.14.1.6.1 NDOT shall prepare a Maintenance Facility Pollution Prevention Program Plans (FPPP)s for all maintenance facilities. Because these facilities are considered municipal activities rather than industrial activities, these FPPPs must have BMP programs that reduce pollutants to MEP.

4.14.1.6.2 Generic FPPP elements can be used for activities that are performed at more than one maintenance facility; however, each site must be evaluated separately and provided with appropriate site specific BMPs.

4.14.1.6.3 NDEP staff has the authority to require the submittal of a FPPP at any time, to require changes to a FPPP, and to require the implementation of the Provisions of a FPPP.

5 Monitoring, Recordkeeping, and Reporting

5.1 Monitoring

5.1.1 NDOT shall submit to NDEP a stormwater monitoring plan for the following year on or before October 1 each year. In developing the plan, NDOT must evaluate and update as necessary how monitoring may assist in making decisions about program compliance, the appropriateness of identified best management practices, and progress toward achieving identified measurable goals. Pending submittal of the annual monitoring plan, NDOT shall continue to implement the existing monitoring plan.

5.1.2 When NDOT conducts monitoring at NDOT's permitted MS4, NDOT is required to comply with the following: